ENVIRONMENTAL CHEMISTS

Date of Report: 01/11/00 Date Received: 01/06/00

Project: Metro Self Monitor, PO# M63305

Date Extracted: 01/10/00 Date Analyzed: 01/10/00

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID		<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	Zinc
M63305		0.36	0.37	0.42	< 0.05
Method Blan	nk	< 0.05	< 0.05	< 0.05	< 0.05

ENVIRONMENTAL CHEMISTS

Date of Report: 01/11/00 Date Received: 01/06/00

Project: Metro Self Monitor, PO# M63305

QUALITY ASSURANCE RESULTS FaR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 001024-01 (Duplicate)

					Relative		
	기교 하루 시간 사람들은 얼마 없다.	Reporting Sample Duplicate Percent Units Result Result Difference		e Percent	Acceptance	•	
_	Analyte	Units	Result	Result	Difference	Criteria	_
Į	Chromium	mg/L (ppm)	0.36	0.39	8	0-20	
	Copper	mg/L (ppm)	0.37	0.35	6	0-20	
	Nickel	mg/L (ppm)	0.42	0.45	7	0-20	
	Zinc	mg/L (ppm)	< 0.05	< 0.05	nm	0-20	

Laboratory Code: 001024-01 (Matrix Spike)

		Reporting	Spike	Sample	% Recov	ery	% Recov	ery	Acceptance	e	
Analyte	\$ - x	Units	Level	Result	MS		MSD		Criteria	RPI)
 Chromium		mg/L (ppm)	5	0.36	96	-11.55	93		80-120	3	
Copper		mg/L (ppm)	5	0.37	89		87		80-120	2	
Nickel		mg/L (ppm)	10	0.42	98		97		80-120	1	
Zinc		mg/L (ppm)	5	< 0.05	104		103		80-120	1	

Laboratory Code: Laboratory Control Sample

	Reporting	Spik	e % Recov	ery % Recov	ery Acceptanc	e	
Analyte	Units	Leve	l LCS	LCSI	<u>Criteria</u>	RPI)
Chromium	mg/L (ppm)	5	97	99	80-120	2	
Copper	mg/L (ppm)	5	95	97	80-120	2	
Nickel	mg/L (ppm)	10	99	101	80-120	2	
Zinc	mg/L (ppm)	5	102	102	80-120	0	

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

001024

(SH 1.6.2K AI,

SAMPLE CHAIN OF CUSTODY

4									
Send Report To: 11.2	· · · · · · · · · · · · · · · · · · ·	1 1 10		Contac	6	- H	1-1		
Company AW8		Works		Contac	t	(CC) ~	7 /0	go-	
Address 628 A		98174					•		
Phone # 206-382-8	FAX#					1-6-00)		
SITE NO.	PROJE	PURCHASE ORDER #							
7278		metro Seld	non	Hac !	m 63305				
SAMPLERS (signature)				Т	PROJECT LOCATION				
and al		-						<u>. </u>	
REMARKS					SAMPLE DISPOSAL INFORMATION				
				1	Dispose after 30 days			'S	
		•				Return Sar	-		
	D (m:	Topo of	# of	l Lab		Call for In	Analyses		
Sample #	Date/Time , Sampled	Type of Sample	Jars	Sample i	#	• .	Requested		
m63305	1/6/00 12:40	H20	1	01		OK	Cu	いいこと	
11165305	7400 1280	1 77.00							
		<u> </u>							
							•		
		3 '							
				<u> </u>		······································			
						•			
			1			r			
						Þ			
			 						
						•			
SIGNATURE/		PRINT NAME		COMPAI	<u>4</u> Y		Date	Time	
Relinfoished by:	- Geral	1 A. Though	سة	Ach	7	1/6	100	1:19pm	
Recoved by:	~\S.	05 OR1	U	FJB	, In	2 2	p/6/e	x Zpin	
Relinquished by:									
Received by:									
1	1								

FORMS/COC

11/29/99

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

January 11, 2000

DUPLICATE COPY

INVOICE #00ACU0111-1

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor Grab-PO# PO# M63305: Results of testing requested by Gerry Thompson for material submitted on January 6, 2000.

1 water sample analyzed for Chromium, Copper, Nickel, and Zinc using Method 6010 @ \$80 per sample

\$ 80.00

PLEASE NOTE: As a convenience for our valued clients, we can accept credit cards (VISA, MasterCard or government purchasing cards) for payment on our invoices. Please contact our office if you would like to take advantage of this service.

FEDERAL TAX ID (b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

January 11, 2000

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on January 6, 2000 from your Metro Self Monitor, PO# M63305 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.
Dianne C. Huet

Dianne C. Hurt Project Manager

Enclosures ACU0111R.DOC